

CLAIMS:

1. A power supply unit capable of being charged and discharged, comprising:

at least a first cell; and

a plurality of second cells connected in parallel to said first cell, and capable of selected one of the electrolysis of the electrolytic solution and the recombination of the generated gas;

wherein a plurality of said parallel circuits each including the first cell and the second cells are connected in series, and

wherein a charger/discharger is adapted to charge said cells up to a voltage at which the electrolytic solution of said second cells is electrolyzed or a voltage at which the generated gas is recombined.

2. A power supply unit according to Claim 1, wherein said first cell group and said second cell group are connected in parallel through a current limiter.

3. A power supply unit according to Claim 1, wherein a plurality of said series circuits each including said first cell group and said second cell group are connected in parallel.

4. A power supply unit according to Claim 1, wherein the withstanding voltage of said first cell group is higher than the withstanding voltage of said second cell group.

5. A power supply unit according to Claim 1,
wherein said first cell group and said second cell group are so configured that at least said second cell group includes a plurality of cells in series, and an intermediate terminal is inserted for each unit number of the cells in series.

6. A power supply unit according to Claim 1,
wherein said first cell group and said cell group share at least one component element.

7. A power supply unit according to Claim 6,
wherein said component element shared is the electrolytic solution.

8. A power supply unit according to Claim 6,
wherein at least selected one of said first cell group and said second cell group has an electrode formed of selected one of carbon fiber and carbon nanotube.

9. A distributed power supply system,
wherein a first power supply unit including a first cell group and a second cell group is connected in parallel with a second power supply unit,

wherein in the case where said second power supply unit is deficient of power, power is supplied as an assistance from said first power supply unit;

wherein in the case where extraneous power is generated by said second power supply unit, said first power supply unit is charged by a charger with the power of said second power supply unit to a voltage at

which the electrolytic solution of said second cell group of said first power supply unit is electrolyzed or the generated gas is recombined.

10. An electric vehicle comprising a motor-generator for driving the vehicle and generating regenerative power and a power supply unit connected to said motor-generator,

wherein said power supply unit includes a first cell group and a second cell group connected in parallel to said first cell group,

wherein said power supply unit further includes a charger capable of charging said second cell group up to a voltage at which the electrolytic solution of the second cells of said cell power supply unit is electrolyzed or a voltage at which the generated gas is recombined.